

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently amended): An ultrasonic diagnostic apparatus, comprising:

an ultrasonic probe including a window in contact with a test subject, the window having an inner surface and an outer surface;

a sound velocity calculation means for calculating the sound velocity of ultrasonic waves based on the difference between the reflex time of ultrasonic wave reflected from the inner surface of the[[a]] window in contact with a test subject and the reflex time of ultrasonic wave reflected from the outer surface of the window and the thickness of the window;

a temperature calculation means for calculating the temperature of the window based on sound velocity calculated by the sound velocity calculation means; and

an ultrasonic wave output control means for controlling ultrasonic wave output based on temperature calculated by the temperature calculation means.

Claim 2 (Currently amended): An ultrasonic diagnostic apparatus, comprising:

an ultrasonic probe including a window in contact with a test subject, the window having an inner surface;
a sound velocity calculation means for calculating the sound velocity of ultrasonic waves based on the reflex time of ultrasonic wave passing through fluid wherein sonic elements vibrate and reflected from the inner surface of the[[a]] window, ~~in contact with a test subject~~ and the thickness of the fluid;
a temperature calculation means for calculating the temperature of the fluid based on the sound velocity calculated by the sound velocity calculation means; and
an ultrasonic wave output control means for controlling ultrasonic wave output based on temperature calculated by the temperature calculation means.

Claim 3 (Previously presented): The ultrasonic diagnostic apparatus according to claim 1, further comprising:

a memory means for storing the thickness of said window and the thickness of said fluid obtained by detecting said reflex times of ultrasonic waves under a certain temperature beforehand and performing calibrations respectively, for the window and the fluid; and, wherein

said sound velocity calculation means calculates the sound velocity of ultrasonic waves based on the thickness of the window or the thickness of the fluid stored by the memory means.

Claim 4 (Previously presented): The ultrasonic diagnostic apparatus according to claim 2, further comprising:

a memory means for storing the thickness of said window and the thickness of said fluid obtained by detecting said reflex times of ultrasonic waves under a certain temperature beforehand and performing calibrations respectively, for the window and the fluid; and, wherein

said sound velocity calculation means calculates the sound velocity of ultrasonic waves based on the thickness of the window or the thickness of the fluid stored by the memory means.